



WIRELESS BASE STATION NEIGHBOR DISCOVERY IN A COMMUNICATION SYSTEM,
SUCH AS A SYSTEM EMPLOYING A SHORT-RANGE FREQUENCY HOPPING SCHEME

CROSS-REFERENCE TO RELATED APPLICATION(S)

This application is a continuation of international application no. PCT/US02/13880 filed May 2, 2002, and claims the benefit of U.S. Provisional Patent Application No. 60/288,296, filed May 2, 2001, both of which are incorporated by reference.

BACKGROUND

The disclosed embodiments relate to wireless systems and networks.

Cellular mobile telephony provides voice and data links between users of mobile devices and fixed devices on a network. It gives users mobility without regard to how they are actually connected to the network. This is done by providing access points or base station units (BSU) that can hand off the connections of mobile devices without interruption of the service. 2G (second generation) digital mobile phone service and AMPS (analog mobile phone service) are examples of such telephone networks.

Many limitations exist with such telephony networks. For example, while cellular mobile telephony networks generally provide service over large areas, such networks have limited capacity for the number of user devices that can be connected within the area covered by each BSU.

The bandwidth provided to users of this service is generally considered low bandwidth or "narrow-band access." Thus, large data applications, such as transferring of large data files, cannot be effectively performed using such networks.

Providers of this service must acquire rights to use licensed radio spectra, often at high investment costs. Thus, employing such networks can be quite expensive for many applications or users.

This type of service is often unavailable or unreliable in certain areas, such as office buildings, convention centers, and train stations, due to physical properties of these areas and/or due to the density of users seeking access to the service.